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IN THE CLAIMS:

--1. (CURRENTLY AMENDED) A fluid cleaner utilizing a fluid flow comprising:

fluid delivery means for providing a fluid flow; and

5 a toroidal vortex nozzle, said nozzle comprising an inner tube and an outer tube, said nozzle being coupled to said fluid delivery means;

~~wherein a fluid~~ wherein said fluid flow through said nozzle has substantially the characteristics of a toroidal vortex wherein said toroidal vortex creates a low pressure region to attract matter, and further wherein said toroidal vortex is a substantially recirculating unit volume of fluid.

2. (ORIGINAL) A fluid cleaner in accordance with claim 1  
15 further comprising wheels.

3. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising a brush.

4. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising a rotating brush.

20 5. (CURRENTLY AMENDED) A fluid cleaner in accordance with claim 1 wherein the distal end of said toroidal vortex nozzle is rectangular.

6. (CURRENTLY AMENDED) A fluid cleaner in accordance with claim 1 wherein the ~~annular duct formed~~ region between said inner tube and said outer tube is vented.

7. (ORIGINAL) A fluid cleaner in accordance with claim 1  
5 further comprising a watertight housing.

8. (ORIGINAL) A fluid cleaner in accordance with claim 1 wherein said fluid cleaner is capable of traversing a surface.

9. (ORIGINAL) A fluid cleaner in accordance with claim 1  
10 further comprising a traction motor.

10. (ORIGINAL) A fluid cleaner in accordance with claim 1 wherein said fluid flow is generated by an impeller.

11. (ORIGINAL) A fluid cleaner in accordance with claim 1 wherein said fluid flow is generated by a centrifugal pump.

12. (ORIGINAL) A fluid cleaner in accordance with claim 1  
15 wherein said fluid flow is generated by a propeller.

13. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising a collector.

14. (CURRENTLY AMENDED) A fluid cleaner in accordance  
20 with claim 1 further comprising a collector and a centrifugal separation chamber, wherein the pressure in said collector is greater than in said centrifugal separation ~~means~~ chamber.

15. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising centrifugal separation means.

16. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising:

5        centrifugal separation means; and  
      a removable collector.

17. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising:

      centrifugal separation means; and  
10       a collector.

18. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising:

      centrifugal separation means;  
      a collector; and  
15       a removable plug in said collector.

19. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising:

      centrifugal separation means;  
      a collector; and  
20       a door in said collector.

20. (ORIGINAL) A fluid cleaner in accordance with claim 1 further comprising:

      centrifugal separation means; and  
      a collector;

wherein the pressure in said collector is greater than in  
said centrifugal separation means such that a cylindrical  
fluid flow inside said centrifugal separation means is  
maintained without preventing matter from traveling into  
5 said collector.

21. (CANCELLED)

22. (CANCELLED)

23. (ORIGINAL) A fluid cleaner in accordance with claim 1  
wherein said fluid cleaner operates in a pool.

10 24. (ORIGINAL) A fluid cleaner in accordance with claim 1  
wherein said fluid cleaner traverses a surface submerged in  
a fluid.

25. (CURRENTLY AMENDED) A method of cleaning surfaces  
submerged in a fluid comprising the steps of:

15 attracting matter with a ~~flowing fluid~~ toroidal  
vortex;

centrifugally separating said matter from said fluid;  
and

recirculating said fluid;

20 wherein said method a substantially unit volume of fluid is  
recirculated.

26. (ORIGINAL) A method according to claim 25 wherein  
attracting said matter occurs in a toroidal vortex nozzle.

27. (ORIGINAL) A method according to claim 25 further comprising the step of loosening said matter from said surface.

28. (ORIGINAL) A method according to claim 25 further  
5 comprising the step of loosening said matter from said surface with a brush.

29. (ORIGINAL) A method according to claim 25 further comprising the step of loosening said matter from said surface with a rotating brush.

10 30. (ORIGINAL) A method according to claim 25 wherein said attracting is performed by a toroidal vortex fluid flow.

31. (CURRENTLY AMENDED) A method of separating matter from a fluid comprising the steps of:

15       centrifugally separating said matter from said fluid;  
and

          recirculating said fluid through a toroidal vortex nozzle, wherein a substantially unit volume of fluid is recirculated.

20 32. (ORIGINAL) A method in accordance with claim 31 further comprising the step of brushing a surface to loosen matter from said surface.

33. (ORIGINAL) A method in accordance with claim 31 further comprising the step of:

brushing a surface to loosen matter from said surface;  
and

attracting said matter with said toroidal vortex  
nozzle.

5 34. (ORIGINAL) A method in accordance with claim 31  
wherein said fluid is pool water and said matter is in said  
pool water and on the submerged surfaces of a pool.

35. (NEW) A fluid cleaner utilizing a fluid flow  
comprising:

10 an impeller for providing said fluid flow;

a motor for powering said impeller; and

a toroidal vortex nozzle, said nozzle comprising an  
inner tube and an outer tube, said toroidal vortex nozzle  
coupled to said impeller;

15 a centrifugal separation chamber also coupled to said  
impeller;

a collector coupled to said centrifugal separation  
chamber for storing matter separated from said fluid;

wheels;

20 wherein said nozzle further comprises flow  
straightening vanes disposed therein, and further wherein  
said nozzle is vented.